

# Grade 3 Math Scoring Guidance

**2015-2016 NYC Baseline Performance Tasks**

## Instructions

- The following pages contain guidance on the scoring of the above-named NYC Performance Task.
- Distribute this guide to all staff scoring the task. *Please note: Fall baseline tasks may be administered and scored by the regular classroom teacher and results may be used to plan for instruction throughout the year.*
- The scoring guidance is intended to be used in conjunction with the rubric, which details indicators of performance levels on all rubric traits.

# Overview of the NYC Performance Tasks

The NYC Performance Tasks are comparable baseline and End-of-Year, open-ended assessment pairs that are offered in math, ELA, science, and social studies and promote the instructional shifts of argument and critique, use and analysis of evidence, and exposure to complex texts. The tasks are designed for students to demonstrate their skills in reviewing and analyzing presented evidence and creating an evidence-based argument.

The tasks respond to and support the diversity of curriculum and instruction that exist across NYC schools and act as a resource in these varied settings to support collaborative discourse around curriculum, instruction, and assessment. Tasks are designed to support the Citywide Instructional Expectations by promoting knowledge of students, facilitating alignment to an instructional focus, and developing a culture of collaborative professional learning.

A skills-based, standards-driven rubric accompanies each task and, where feasible, is content agnostic so that it can be used in a variety of ways with other curricular and instructional materials. Rubrics are aligned to the Common Core standards and content-specific New York State standards where appropriate. Topic selection in each grade and subject was influenced by New York City scope and sequence documents.

The following scoring guide structure was adapted from CPET and provides annotated student work samples that show the relationship between the student response and the criteria in the rubric. A matrix of rubric scores and rationales follows each individual student work sample. The guide can also be used to norm scoring practices across teams of educators.

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## Design Principles for the Math Performance Tasks

### Focus Standards

While there may be multiple Common Core standard alignments (partial or full) for each trait in the rubric, the focus standards are used to inform design consistency across grades. In math, the Practices are used as the unifying design principle across grades in lieu of content standards. Grade-level content standard alignment is represented on each rubric.

- MP1: Make sense of problems and persevere in solving them
- MP4: Model with mathematics

See the last page of this guide for a chart of standards alignment per rubric trait across all grade levels.

### Design Concept

The design concept for math addresses the following in each grade band:

Grades K-1

- Inventory

Grades 2-12

- Presentation of context
- Multiple mini-task questions addressing that one context

### Content and Structure

The topic (e.g., "plants") in each task is used to provide context for students to demonstrate mastery of the focus standards and content standards in math. The design of the task is not for students to demonstrate content knowledge on any particular topic. The content standards chosen represent the major work of the grade, and are structured to measure both discrete and complex skill mastery. Unlike other subject area rubrics, rubric traits in math measure the total allowable score points per question; therefore, not every trait on the rubric has descriptors through four points.

# Grade 3 Math Scoring Guidance

## Task Overview

NYC Mathematics Performance Tasks are mathematics tasks in which students are presented with a series of connected questions. Each question on the task is intended to address understanding and proficiency of mathematical content, as well as engagement with mathematical practices.

### Student Task

Students produce **a numerical** and/or written response. Sample student responses have been provided to you; further information regarding these annotated student works are provided below.

### Evaluator Task

You are being asked to use your best, professional judgment to score these student responses using the rubric provided.

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## General Instructions for Using the Rubric

- (1) Scorers will use the separate rubric provided to assess student performance.
- (2) These traits are being scored for content and practice. Point values may vary from question to question, and there is no eligible point value for areas on the rubric that are blank.
- (3) You are to provide one score for each rubric trait. Please be sure to enter all trait scores on the appropriate Schoolnet Answer Sheet for each student. The final score for the task will be calculated elsewhere.
- (4) All student work in the task booklet should be scored, regardless of whether the student completed or attempted every question.
- (5) A score of “Zero (0) – No attempt” should be considered carefully before being used. See included student work samples for guidance. Scores of “Zero (0) – No attempt” should only be given if:
  - (a) a student did not attempt that question on **any portion** of the task, or
  - (b) if his/her work is **completely copied** directly from the task or texts, or
  - (c) if his/her work is completely unrelated to the question or prompt.

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## Annotated Student Work

The following pages include annotated student work samples at a variety of performance levels. The samples have been annotated to highlight student responses in relation to the rubric traits. Each sample is followed by a summary page indicating the sample’s score on each rubric trait, in addition to the reasoning for the score. Please review these samples both independently and **with a team** to ensure a common understanding of the rubric traits at all performance levels.

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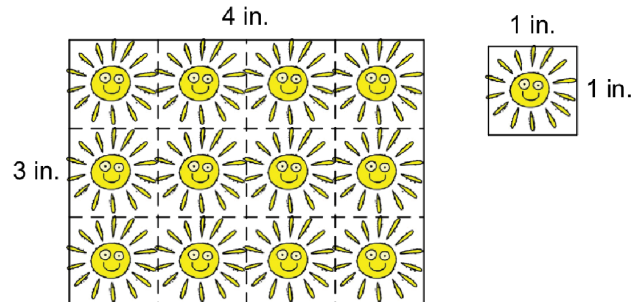
## Best Practices for Scoring

- Before scoring a specific task, teacher **teams** should review the task and the rubric and discuss expected performance at each level for each rubric trait.
- As a group, review annotated student work and **discuss evidence for each score**, including discussing non-blank, zero-scored traits. Work to understand the provided scores and rationales for one sample.
- Individually score a few provided student work samples. After working individually, **compare your assigned scores** to those given by others and to the provided scores and rationales. Be sure you understand how each score was assigned, and that your team agrees, before moving to independent work.
- After independently completing a set of student work from your school, review the set with the group to see if you have drifted away from your original scoring, becoming either more severe or more lenient in response to the task. Consistent scoring is important.

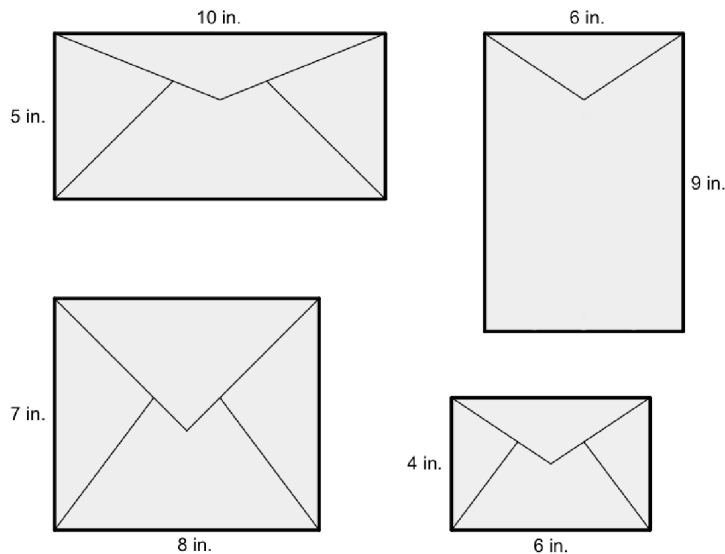


# Stupendous Stickers

Steve makes and sells stickers that are 1 square inch. The stickers come on a rectangular sheet, which can be different sizes depending on the number of stickers that are ordered. The sheet above is 3 inches long and 4 inches wide and has 12 stickers. Steve is trying to decide the best way to mail the stickers.



**1 Steve is thinking about using one of these four different envelopes:**



**Which envelope has the largest area?** The 7 × 8

**Show your work.**

$$6 \times 9 = 54$$

$$7 \times 8 = 56 \quad 56 > 54 \text{ \& } 50$$

$$5 \times 10 = 50$$

**T1**

The student gives the correct answer and correct work is shown.



- 2 Steve decides that the envelope that is 4 in. long and 6 in. wide will be best one to use. It will cost less and he can put more than one sheet of stickers in an envelope.

Steve knows that each sheet has to be 6 inches long to fit in the envelope. To fit the two sheets, what could be the lengths and widths of each sheet to mail exactly 42 stickers?

Sheet 1: 4 × 6

Sheet 2: 3 × 6

T2

The correct answer is shown, and the work is correct.

Show your work.

$$4 \times 6 = 24$$

$$3 \times 6 = 18$$

$$24 + 18 = 42$$

$$4 + 3 = 7 \quad 7 \times 6 = 42$$

- 3 Steve prints a sheet of 48 stickers for an order. There are 6 stickers in each row of the sheet.

How many rows are there? 8

T3

The correct answer is shown, and the work is correct.

Write and solve a multiplication sentence to model the problem.

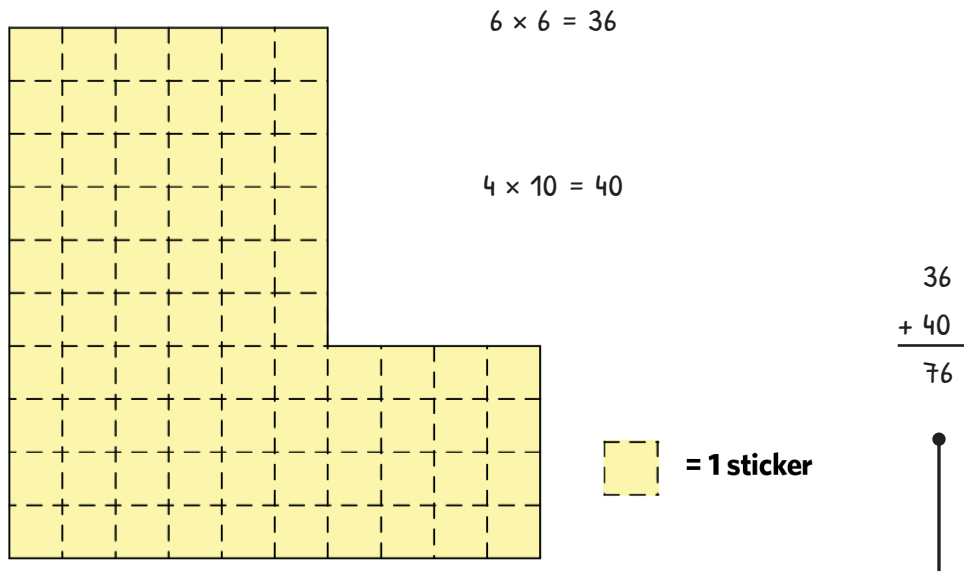
$$6 \times 8 = 48$$

$$48 \div 6 = 8$$

$$6 \times 8 = 48$$



- 4 Steve prints a large sheet of stickers and then realizes he only needs part of it. He cuts out the part he needs, leaving the sheet below.



How many stickers are left on the sheet? 76 stickers stickers

T4

The correct answer is shown, and the work is correct.

Show your work using number sentences.



- 5 Steve prints a large order that has 9 sheets. Each sheet has 80 stickers.

How many total stickers were ordered? \_\_\_\_\_

Show your work.

$$9 \times 8 = 72$$

We need to bump 72 up a place value to make

it 720 stickers

T5

The correct answer is shown, and the work is explained.

- 6 Dan is planning a party. He decides to give 8 stickers to each of his 5 guests. However, only 4 guests come to the party. Dan shares the stickers equally among the 4 guests.

How many stickers did each guest get? 10 stickers each

Show your work.

$$8 \times 5 = 40$$

$$40 \div 4 = 10$$

T6

The correct answer is shown, and the work is complete.



- 7** Michaela wants to collect 60 stickers. She can buy 8 stickers each week.

After 6 weeks, how many more stickers does she need to have 60 stickers? 12 more stickers

Use estimation to show why your answer is reasonable.

$$8 \times 6 = 48 \text{ stickers}$$

$$48 + 2 = 50 \quad 50 + 10 = 60 \quad 10 + 2 = 12 \text{ more stickers}$$

**T7**

The correct answer is shown, and work is complete. The student also explains their thinking using estimation.

My answer is reasonable because 48 is not very far away from 60. So the number doesn't have to be very big, like 12.



# Sample A - Anchor Paper Commentary

**Subject/Course:** Math

**Task Title:** Stupendous Stickers

**Grade Level:** 3

**Year:** 2015-2016

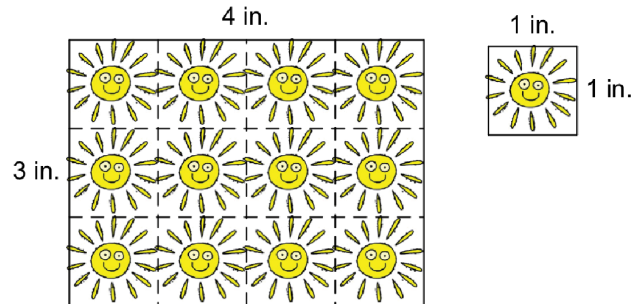
Rubric Traits	Anchor Score	Commentary/Rationale	Maximum Score
<b>T1</b> Trait 1	2	The student gives the correct answer and shows the correct work.	2
<b>T2</b> Trait 2	2	The student arrives at the correct answer, 6-by-4 and 6-by-3, and shows the equations used.	2
<b>T3</b> Trait 3	2	The student gives the correct answer, 8 rows. The student shows a multiplication equation and uses division to show how the multiplication equation was solved.	2
<b>T4</b> Trait 4	2	The correct answer of 76 is found and the equations are shown:  $6 \times 6 = 36$ and $4 \times 10 = 40$ , and their sum $36 + 40 = 76$ .	2
<b>T5</b> Trait 5	2	The correct answer 720 is arrived at by multiplying 9 and 8 and adjusting the product by “bumping up the place value,” of 72 to 720.	2
<b>T6</b> Trait 6	2	The correct answer 10 is shown as well as the equations used: $5 \times 8 = 40$ ; $40 \div 4 = 10$ .	2
<b>T7</b> Trait 7	2	The student shows the correct answer, 12, as well as the equations used: $8 \times 6 = 48$ , and then counting up to 60 adding 2 then 10. The student also explains why the answer is reasonable using estimation.	2

**Score = 14/14, Level 4: Exceeding Standards**

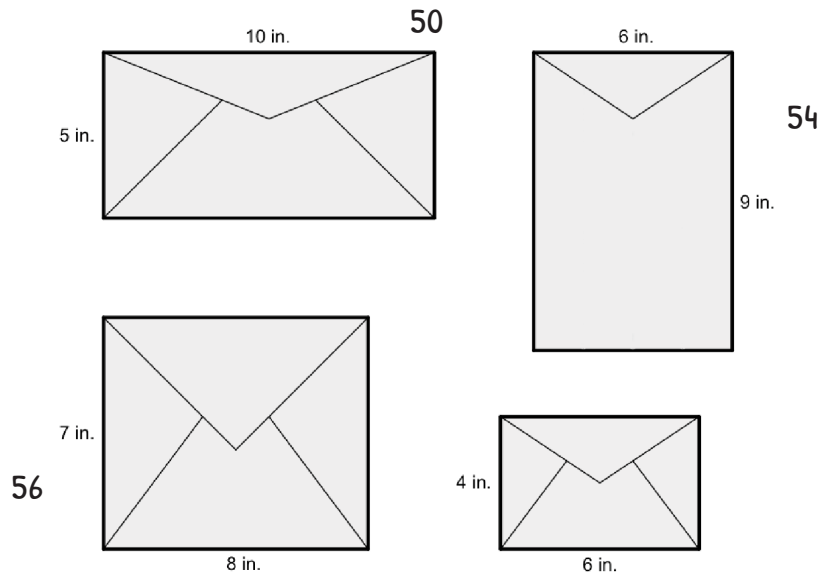


# Stupendous Stickers

Steve makes and sells stickers that are 1 square inch. The stickers come on a rectangular sheet, which can be different sizes depending on the number of stickers that are ordered. The sheet above is 3 inches long and 4 inches wide and has 12 stickers. Steve is trying to decide the best way to mail the stickers.



**1 Steve is thinking about using one of these four different envelopes:**



Which envelope has the largest area? 7 x 8

T1

The correct answer and the product/total stickers for each envelope are shown.

Show your work.

$$\begin{array}{r} 7 \times 10 = 70 \\ - 2 \\ \hline 7 \times 8 = 56 \end{array}$$

$$7 \times 2 = 14$$



- 2 Steve decides that the envelope that is 4 in. long and 6 in. wide will be best one to use. It will cost less and he can put more than one sheet of stickers in an envelope.

Steve knows that each sheet has to be 6 inches long to fit in the envelope. To fit the two sheets, what could be the lengths and widths of each sheet to mail exactly 42 stickers?

Sheet 1: 4 × 6

Sheet 2: 3 × 6

Show your work.

$$4 \times 6 = (24)$$

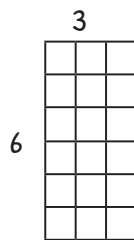
$$3 \times 6 = (18)$$

$$4 \times 6$$

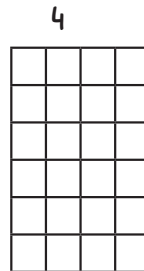
$$3 \times 6$$

$$(42)$$

$$42 \div 2 = 21$$



6



$$3 \times 6 = (18)$$

$$4 \times 6 = (24)$$

T2

The correct answer is shown, and the work is correct.

- 3 Steve prints a sheet of 48 stickers for an order. There are 6 stickers in each row of the sheet.

How many rows are there? 8

Write and solve a multiplication sentence to model the problem.

$$8 \times 6$$

$$4 \times 6 = 24$$

$$8 \times 6 = (48)$$

$$\begin{array}{r} \times 2 \\ 48 \end{array}$$

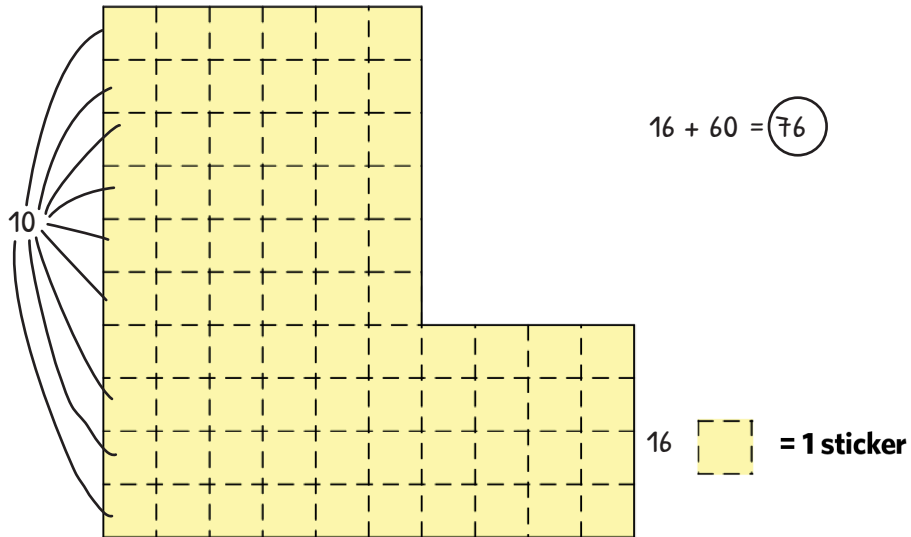


T3

The correct answer is shown, and the work is correct.



- 4 Steve prints a large sheet of stickers and then realizes he only needs part of it. He cuts out the part he needs, leaving the sheet below.



How many stickers are left on the sheet? 76 stickers

Show your work using number sentences.

$$60 + 16 = 76$$

T4

The correct answer is shown, but the work is not complete as the student has not shown how 16 and 60 were obtained.



- 5 Steve prints a large order that has 9 sheets. Each sheet has 80 stickers.

How many total stickers were ordered? 320 stickers

T5

The student's work/thinking is correct, but a computational error was made ( $180 \times 2 = 360$ ).

Show your work.

1	$20 \times 9 = 180$	$180 \times 2 =$	260	$80 \div 4 = 20$
2	$20 \times 9 = 180$	$180 \times 2 =$	+ 260	
3	$20 \times 9 = 180$		320	
4	$20 \times 9 = 180$			

- 6 Dan is planning a party. He decides to give 8 stickers to each of his 5 guests. However, only 4 guests come to the party. Dan shares the stickers equally among the 4 guests.

How many stickers did each guest get? 10 stickers

Show your work.

8	8	8	8
😊	😊	😊	😊
2	2	2	2

$$8 \div 4 = 2$$

$$8 + 2 = 10$$

T6

The correct answer is shown, and the work is correct. The student knows that each guest was to get 8 stickers, leaving 8 to distribute from the missing guest, giving each guest 2 more stickers:  $8 \div 4 = 2$  more each, 8 to start + 2 more = 10 each.



- 7 Michaela wants to collect 60 stickers. She can buy 8 stickers each week.

After 6 weeks, how many more stickers does she need to have 60 stickers? 12 more stickers

Use estimation to show why your answer is reasonable.

$$6 \times 8 = 60 - (12) = 48 + (12) = 60$$

because I know  $6 \times 8 = 48$  so  $+ 12$  gets you to 60!

T7

The correct answer is shown, and the work is correct. However, the student does not use estimation to explain why the answer is reasonable.

# Sample B - Anchor Paper Commentary

**Subject/Course:** Math

**Task Title:** Stupendous Stickers

**Grade Level:** 3

**Year:** 2015-2016

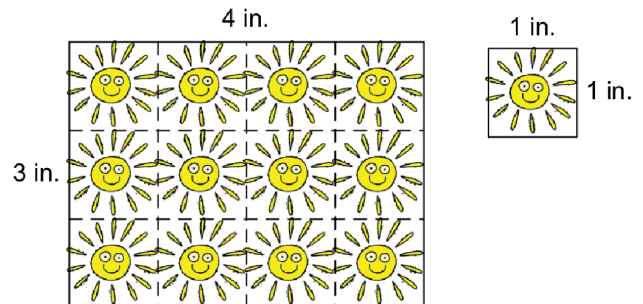
Rubric Traits	Anchor Score	Commentary/Rationale	Maximum Score
<b>T1</b> Trait 1	2	The student chooses the correct envelope, 7 x 8, and shows the number of stickers for each envelope.	2
<b>T2</b> Trait 2	2	The student arrives at the correct answer 6-by-4 and 6-by-3, and shows the equations used.	2
<b>T3</b> Trait 3	2	The student gives the correct answer, 8 rows, and shows a multiplication equation.	2
<b>T4</b> Trait 4	1	The correct answer of 76 is found but only 1 equation is shown: $16 + 60 = 76$ . The student does not show where 16 and 60 are derived from.	2
<b>T5</b> Trait 5	1	The student's thinking is correct, but a computational error is made.	2
<b>T6</b> Trait 6	2	The correct answer 10 is shown as well as the equations used.  The student starts with the initial statement that each guest gets 8 stickers. There are 8 more stickers to distribute among the 4 guests  $(8 \div 4 = 2)$ , so each gets 10  $(8 + 2 = 10)$ .	2
<b>T7</b> Trait 7	1	The student shows the correct answer, 12, as well as the equations used, but the student does not use estimation to explain why the answer is reasonable.	2

**Score = 11/14, Level 3: Meeting Standards**

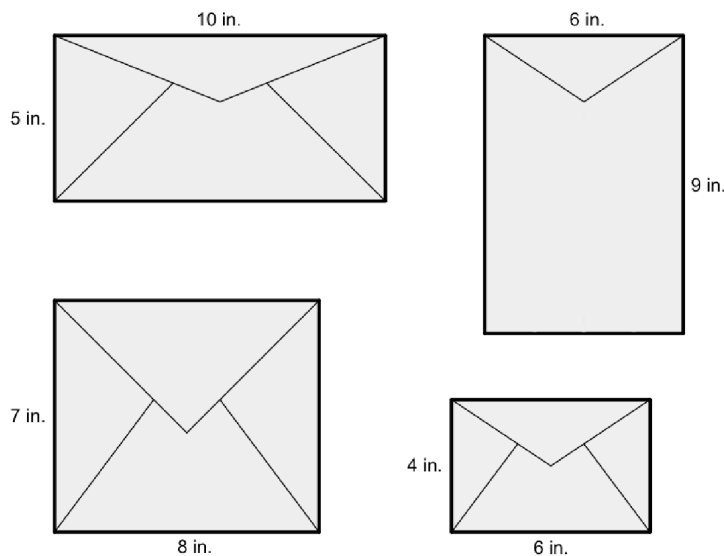


# Stupendous Stickers

Steve makes and sells stickers that are 1 square inch. The stickers come on a rectangular sheet, which can be different sizes depending on the number of stickers that are ordered. The sheet above is 3 inches long and 4 inches wide and has 12 stickers. Steve is trying to decide the best way to mail the stickers.



**1 Steve is thinking about using one of these four different envelopes:**



**Which envelope has the largest area?** 7 in. & 8 in.



The correct answer is shown, and the work is complete and accurate.

**Show your work.**

1.	10 in. $\times$ 5 in. = 50 in	3.	50 in. < 54 in.
2.	6 in. $\times$ 9 in. = 54 in	4.	54 in. < 56 in.
3.	7 in. $\times$ 8 in. = 56 in		





- 2** Steve decides that the envelope that is 4 in. long and 6 in. wide will be best one to use. It will cost less and he can put more than one sheet of stickers in an envelope.

Steve knows that each sheet has to be 6 inches long to fit in the envelope. To fit the two sheets, what could be the lengths and widths of each sheet to mail exactly 42 stickers?

Sheet 1: 6 × 4

Sheet 2: 6 × 3

T2

The correct answer is shown, and the work is correct.

**Show your work.**

6 in. long, 4 in wide

6 in. long, 3 in wide

4 & 3 rows

$$6 \times 4 = 24$$

$$6 \times 3 = 18$$

$$24 + 18 = 42$$

- 3** Steve prints a sheet of 48 stickers for an order. There are 6 stickers in each row of the sheet.

How many rows are there? 8 rows

T3

The correct answer is shown, and the work is correct.

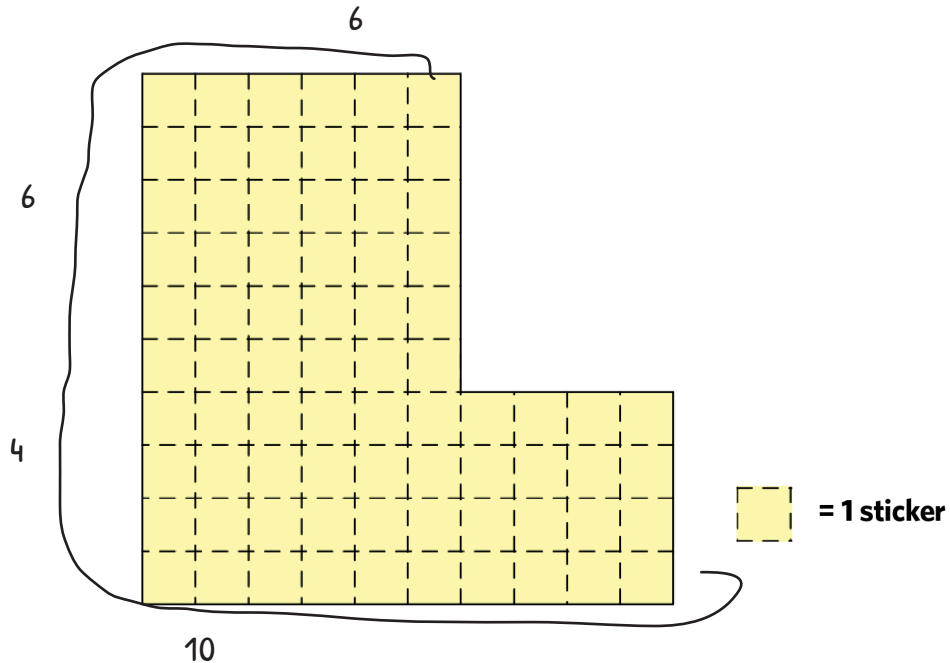
Write and solve a multiplication sentence to model the problem.

8 rows

$$6 \times 8 = 48$$



- 4 Steve prints a large sheet of stickers and then realizes he only needs part of it. He cuts out the part he needs, leaving the sheet below.



How many stickers are left on the sheet? 52 stickers stickers

Show your work using number sentences.

52 stickers

$$6 \times 6 = 12$$

$$4 \times 10 = +40$$

$$12 + 40 = 52$$

T4

The student uses correct equations, but makes a computational error.



- 5 Steve prints a large order that has 9 sheets. Each sheet has 80 stickers.

How many total stickers were ordered? 700

Show your work.

$$80 \times 4 = 320$$

$$80 \times 5 = + 400$$

700 stickers

T5

The student uses correct equations, but makes a computational error.

- 6 Dan is planning a party. He decides to give 8 stickers to each of his 5 guests. However, only 4 guests come to the party. Dan shares the stickers equally among the 4 guests.

How many stickers did each guest get? 10 stickers

Show your work.

$$5 \times 8 = 40$$

$$40 \div 4 = 10 \text{ stickers}$$

T6

The correct answer is shown, and the work is correct.



- 7 Michaela wants to collect 60 stickers. She can buy 8 stickers each week.

After 6 weeks, how many more stickers does she need to have 60 stickers? 36 more stickers

Use estimation to show why your answer is reasonable.

36 stickers

$$6 \times 8 = 24$$



10

6

1	2	3	4	5	31					
6	7	8	9	10	32					
11	12	13	14	15	33					
16	17	18	19	20	34					
21	22	23	24	25	35					
26	27	28	29	30	36					

T7

The student is not sure how to proceed, the answer is incorrect, and the work is unclear.

# Sample C - Anchor Paper Commentary

**Subject/Course:** Math

**Task Title:** Stupendous Stickers

**Grade Level:** 3

**Year:** 2015-2016

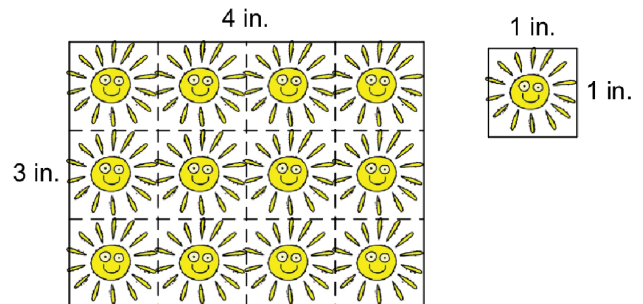
Rubric Traits	Anchor Score	Commentary/Rationale	Maximum Score
<b>T1</b> Trait 1	2	The student chooses the correct envelope, 7 x 8, and shows equations for each envelope.	2
<b>T2</b> Trait 2	2	The student arrives at the correct answer 6-by-4 and 6-by-3, and shows the equations used.	2
<b>T3</b> Trait 3	2	The student gives the correct answer, 8 rows, and shows a multiplication equation.	2
<b>T4</b> Trait 4	1	The student's thinking is correct, with correct equations shown. However, a computational error is made.	2
<b>T5</b> Trait 5	1	The student's thinking is correct, but a computational error is made.	2
<b>T6</b> Trait 6	2	The correct answer 10 is shown as well as the equations used.	2
<b>T7</b> Trait 7	0	The student is unsure how to proceed, and the work is unclear.	2

**Score = 10/14, Level 3: Meeting Standards**

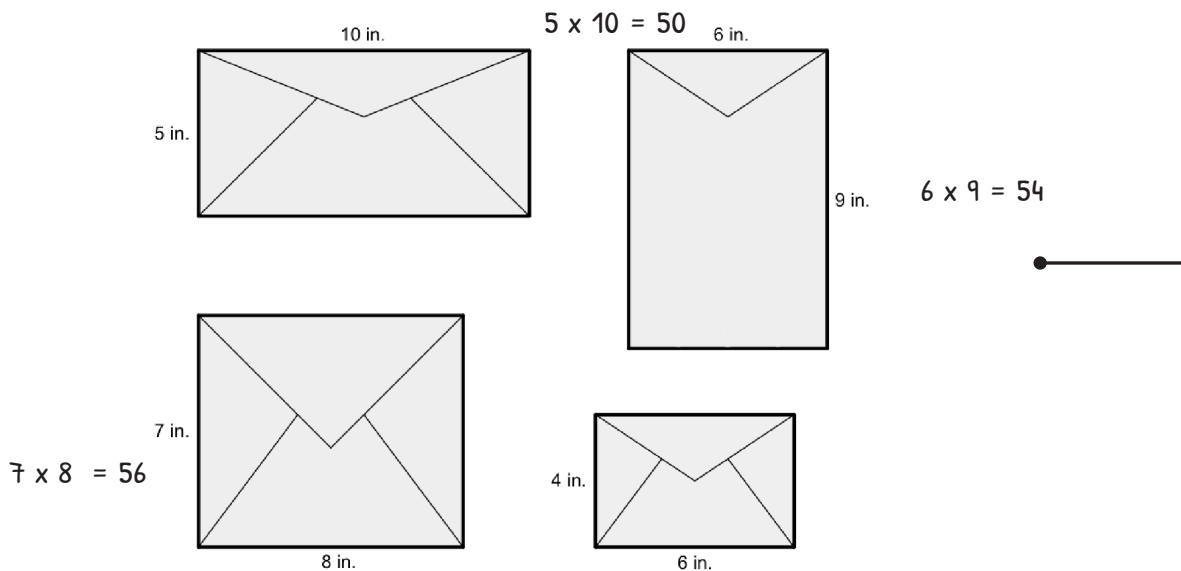


## Stupendous Stickers

Steve makes and sells stickers that are 1 square inch. The stickers come on a rectangular sheet, which can be different sizes depending on the number of stickers that are ordered. The sheet above is 3 inches long and 4 inches wide and has 12 stickers. Steve is trying to decide the best way to mail the stickers.



**1 Steve is thinking about using one of these four different envelopes:**



**Which envelope has the largest area?** 7  $\times$  8



The correct answer is shown, and the work is complete.

**Show your work.**



- 2 Steve decides that the envelope that is 4 in. long and 6 in. wide will be best one to use. It will cost less and he can put more than one sheet of stickers in an envelope.

Steve knows that each sheet has to be 6 inches long to fit in the envelope. To fit the two sheets, what could be the lengths and widths of each sheet to mail exactly 42 stickers?

Sheet 1:  $6 \times 7$

Sheet 2:  $3 \times 14$

T2

The answers are incorrect, and the work shows misconceptions.

Show your work.

$$6 \times 7$$

$$3 \times 14$$

$$6 \times 6 = 36$$

$$36 + 6 = 42$$

$$6 + 1 = 7$$

$$6 \times 7 = 3 \times 14 = 12 \times 3 \frac{1}{2}$$

- 3 Steve prints a sheet of 48 stickers for an order. There are 6 stickers in each row of the sheet.

How many rows are there? 8

T3

The correct answer is shown, and the work is complete.

Write and solve a multiplication sentence to model the problem.

$$2^1 \times 2^2 \times 2^3 = 8$$

$$6 \times 2 = 12$$

$$12 \times 2 = 24$$

$$24 \times 2 = 48$$

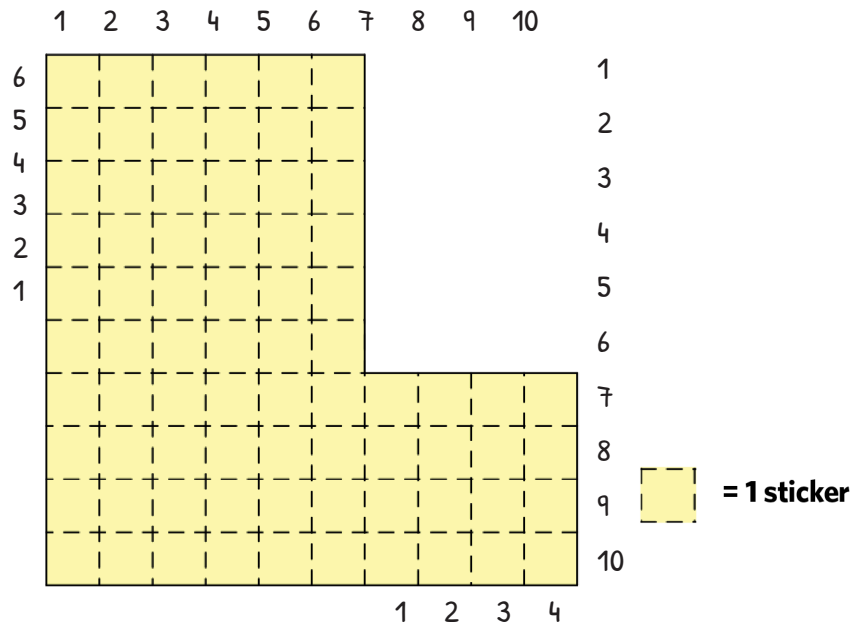
$$6 \times 8 = 48$$

$$48 \div 6 = 8$$





- 4 Steve prints a large sheet of stickers and then realizes he only needs part of it. He cuts out the part he needs, leaving the sheet below.



How many stickers are left on the sheet? 76 stickers stickers

Show your work using number sentences.

$$4 \times 6 = 24$$

$$10 \times 10 = 100$$

$$100$$

$$\underline{-24}$$

$$76$$

T4

The correct answer is shown, and the work is complete. The student finds the total area:  $10 \times 10 = 100$ , and subtracts the missing area:  $4 \times 6 = 24$ ,  $100 - 24 = 76$ .





- 5 Steve prints a large order that has 9 sheets. Each sheet has 80 stickers.

How many total stickers were ordered? 620

Show your work.

$$80 \times 9 = ?$$

$$80 \times 2 = 160$$

$$60 \times 1 = ?$$

$$80 \times 2 = 160$$

$$60 \times 2 = 120$$

$$80 \times 2 = 160$$

$$60 \times 2 = + 120$$

$$80 \times 2 = 160$$

$$140$$

$$80 \times 1 = + 80$$

$$+ 80$$

$$620$$

$$220$$

T5

The student uses correct equations, but makes a computational error.

- 6 Dan is planning a party. He decides to give 8 stickers to each of his 5 guests. However, only 4 guests come to the party. Dan shares the stickers equally among the 4 guests.

How many stickers did each guest get? 2

Show your work.

$$8 \div 4 = \boxed{2} \longrightarrow 8 \div 4 = \boxed{\phantom{00}} = 8 \times \boxed{\phantom{00}} = 4$$

$$> 8 \times \boxed{2} = 4$$

T6

The work shows misconceptions and the answer is incorrect.



- 7 Michaela wants to collect 60 stickers. She can buy 8 stickers each week.

After 6 weeks, how many more stickers does she need to have 60 stickers? 12 more stickers  
(1 ½ more weeks)

Use estimation to show why your answer is reasonable.

$$8 \times 6 = 48 \longrightarrow 8 \times 6 = ?$$

$$8 \times 4 = 32$$

$$8 \times 2 = \begin{array}{r} + 16 \\ 48 \end{array}$$

$$48 + ? = 60$$

$$48 + 2 = 50$$

$$50 + 10 = 60 \quad 10 + 2 = \textcircled{12}$$

because, Michaela has 60 stickers.

8 stickers per week.

$$\begin{array}{r} \times 6 \text{ weeks.} \\ 48 \end{array}$$

How many more stickers does she need to have 60.  $48 + 12 = 60$

$$48 + 2 = 50$$

$$50 + 10 = \textcircled{60}$$
$$\textcircled{12}$$

T7

The correct answer is shown, and the work is correct. However, the student does not use estimation to explain why the answer is reasonable.

# Sample D - Anchor Paper Commentary

**Subject/Course:** Math

**Task Title:** Stupendous Stickers

**Grade Level:** 3

**Year:** 2015-2016

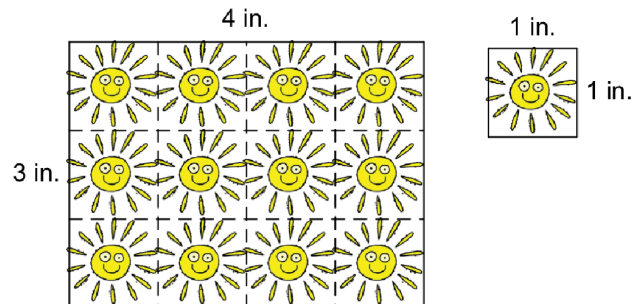
Rubric Traits	Anchor Score	Commentary/Rationale	Maximum Score
<b>T1</b> Trait 1	2	The student chooses the correct envelope, 7 x 8, and shows equations for each envelope.	2
<b>T2</b> Trait 2	0	The student is unsure how to proceed and work shows misconceptions.	2
<b>T3</b> Trait 3	2	The student gives the correct answer, 8 rows, and shows a missing factor multiplication equation and division to solve.	2
<b>T4</b> Trait 4	2	The student's thinking is correct, with correct equations shown.	2
<b>T5</b> Trait 5	1	The student's thinking is correct, but a computational error is made.	2
<b>T6</b> Trait 6	0	The answer is incorrect, and the student's thinking is unclear.	2
<b>T7</b> Trait 7	1	The student shows the correct answer, 12, as well as the equations they used, but does not use estimation to explain why the answer is reasonable.	2

**Score = 8/14, Level 2: Approaching Standards**

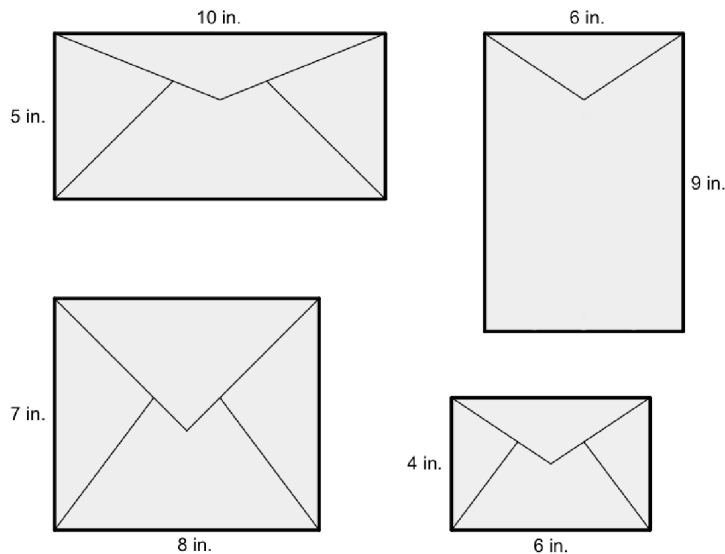


# Stupendous Stickers

Steve makes and sells stickers that are 1 square inch. The stickers come on a rectangular sheet, which can be different sizes depending on the number of stickers that are ordered. The sheet above is 3 inches long and 4 inches wide and has 12 stickers. Steve is trying to decide the best way to mail the stickers.



**1 Steve is thinking about using one of these four different envelopes:**



**Which envelope has the largest area?** they have the same area

**Show your work.**

$$+ 5 = 15$$

$$+ 8 = 15$$

$$+ 9 = 15$$



The work shows misconceptions. The student added the length of two sides for each of the envelopes.



- 2 Steve decides that the envelope that is 4 in. long and 6 in. wide will be best one to use. It will cost less and he can put more than one sheet of stickers in an envelope.

Steve knows that each sheet has to be 6 inches long to fit in the envelope. To fit the two sheets, what could be the lengths and widths of each sheet to mail exactly 42 stickers?

Sheet 1: 2 x 18

Sheet 2: 4 x 9

Show your work.

$$2 \times 18 R7$$

$$4 \times 9 R2$$

T2

The student's work shows misconceptions and is incorrect.

- 3 Steve prints a sheet of 48 stickers for an order. There are 6 stickers in each row of the sheet.

How many rows are there? 10

Write and solve a multiplication sentence to model the problem.

$$1 \times 10 = 10$$

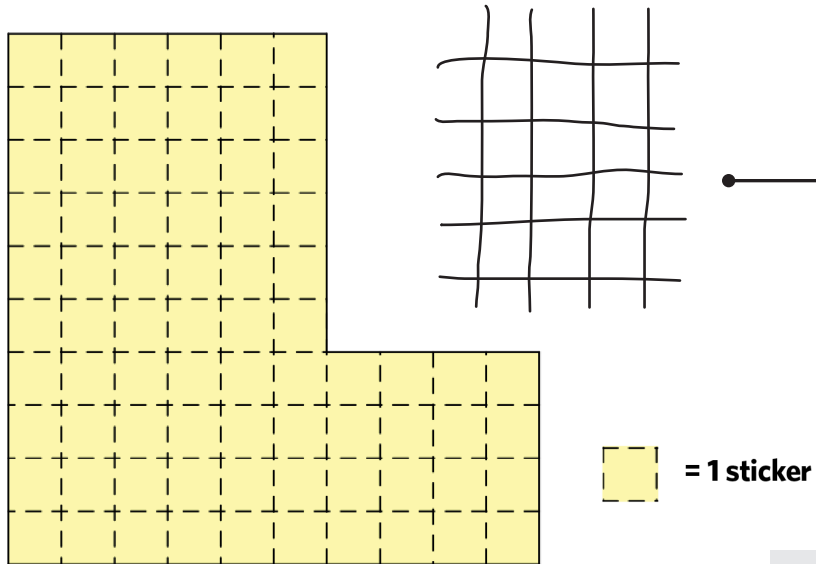
$$1 \times 10 = 10$$

T3

The student's work shows misconceptions and is incorrect.



- 4 Steve prints a large sheet of stickers and then realizes he only needs part of it. He cuts out the part he needs, leaving the sheet below.



How many stickers are left on the sheet? 76 stickers

Show your work using number sentences.

T4

The answer is correct, however the work shown does not fit with the drawing and no other work is shown.



- 5 Steve prints a large order that has 9 sheets. Each sheet has 80 stickers.

How many total stickers were ordered? 710

Show your work.

$$\begin{array}{r} 9 \times 80 = 720 \\ \begin{array}{r} 80 \\ + 80 \\ \hline 160 \end{array} \quad \begin{array}{r} 160 \\ + 80 \\ \hline 230 \end{array} \quad \begin{array}{r} 390 \\ + 80 \\ \hline 470 \end{array} \quad \begin{array}{r} 630 \\ + 80 \\ \hline 710 \end{array} \end{array}$$

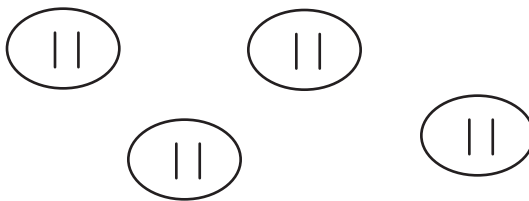
T5

The student gives an incorrect answer based on a computational error.

- 6 Dan is planning a party. He decides to give 8 stickers to each of his 5 guests. However, only 4 guests come to the party. Dan shares the stickers equally among the 4 guests.

How many stickers did each guest get? 2

Show your work.



2 stickers

T6

The work shows misconceptions, and the answer is incorrect.



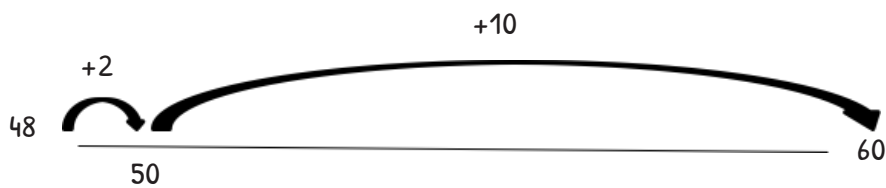
- 7 Michaela wants to collect 60 stickers. She can buy 8 stickers each week.

After 6 weeks, how many more stickers does she need to have 60 stickers? 12 more stickers

Use estimation to show why your answer is reasonable.

$$48 + 12 = 60$$

$$8 \times 6 = \underline{48}$$



$$2 + 10 = 12$$

12

T7

The correct answer is shown, and the work is correct. However, the student does not use estimation to explain why the answer is reasonable.



# Sample E - Anchor Paper Commentary

**Subject/Course:** Math

**Task Title:** Stupendous Stickers

**Grade Level:** 3

**Year:** 2015-2016

Rubric Traits	Anchor Score	Commentary/Rationale	Maximum Score
<b>T1</b> Trait 1	0	The student does not arrive at the correct answer, using addition instead of multiplication.	2
<b>T2</b> Trait 2	0	The student work shows misconceptions, and the answer is not correct.	2
<b>T3</b> Trait 3	0	The student work shows misconceptions, and the answer is not correct.	2
<b>T4</b> Trait 4	1	The student arrives at the correct answer, but the work is not shown.	2
<b>T5</b> Trait 5	1	The incorrect answer, 710, is arrived at by multiplying $9 \times 80$ using partial products, but with a computational error.	2
<b>T6</b> Trait 6	0	The answer is incorrect, and the student's thinking is unclear.	2
<b>T7</b> Trait 7	1	The student shows the correct answer, 12, as well as the equations used, but does not use estimation to explain why their answer is reasonable.	2

**Score = 3/14, Level 1: Attempting Standards**

# Trait to Standard Alignment Chart

		Common Core Standards											
Trait	Question	K	Grade 1	Grade 2	Grade 3	Grade 4	Grade 5	Grade 6	Grade 7	Grade 8	Algebra 1	Algebra 2	Geometry
1	1	K.CC.1	1.NBT.1	2.NBT.4	3.MD.7b	4.OA.2	3.NF.1	6.RP.1	7.EE.3	8.F.4	F.IF.4	G.SRT.8	G.CO.9
2	2	K.CC.2	2.NBT.2	2.NBT.4	3.OA.6	4.MD.3	5.NF.1	6.RP.3a	7.EE.1	8.F.4	F.IF.6	G.SRT.8	G.CO.10
3	3	1.NBT.1	1.NBT.5	2.NBT.7	4.NBT.6	4.OA.4	5.NF.1	6.EE.9	7.RP.3	8.F.4	F.BF.1a,b and F.BF.2	G.SRT.8	G.SRT.4
4	4	K.CC.1	2.NBT.8	2.NBT.4	3MD.7b	4.NBT.5	5.NF.4a	6.RP.3c	7.EE.2	8.EE.8b	4.OA.5	G.SRT.8	G.SRT.5
5	5	1.NBT.5	1.NBT.1	2.NBT.1	3.NBT.3	4.OA.5	5.NF.2	6.RP.3b	7.EE.2	8.EE.8a	F.BF.1a,b and F.BF.2	F.BF.1a	G.SRT.5
6	6	K.CC.3	2.NBT.3	2.NBT.1	3.OA.3	4.MD.2	5.NF.3	6.RP.2	7.RP.3	8.F.2	F.IF.5	F.TF.8	G.CO.5
7	7	1.NBT.1	1.NBT.3		3.OA.8	4.OA.3	5.NF.7b	6.RP.3	7.EE.4b	8.F.4	A.REI.7		G.SRT.5
8	8	K.CC.4	2.NBT.4				5.NF.7a				A.SSE.3a		
9	9	K.CC.6	1.OA.7										
10	10	1.NBT.3	2.OA.2										
11	11	K.OA.1	1.OA.1										
12	12	1.OA.7	2.OA.1										
13	13	K.OA.2											
14	14	1.OA.1											